

## BlackBerry Limited (BB)

**\$5.66** (As of 11/23/20)

Price Target (6-12 Months): **\$6.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 11/23/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**3-Hold**

Zacks Style Scores:

VGM:B

Value: D

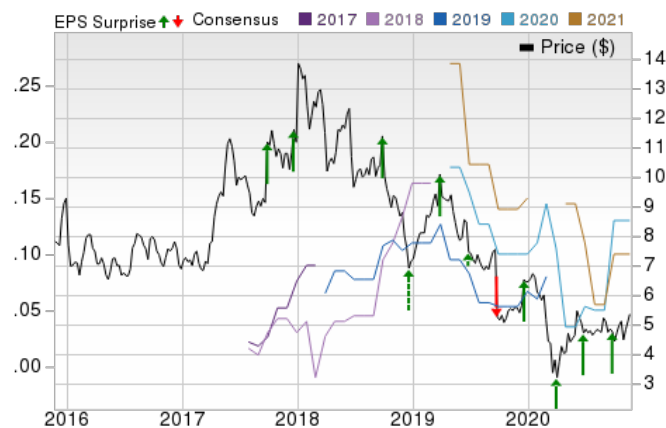
Growth: A

Momentum: C

## Summary

BlackBerry continues to invest in product development and go-to-market strategy to drive long-term sustainable growth. The company is witnessing strong demand for its 'Work from Anywhere' solutions, which is a major driver for the Spark business. BlackBerry secured more than 500 million endpoints including more than 175 million cars. QNX design wins and significant cybersecurity partnerships bode well. With a holistic growth model, BlackBerry aims to expand its market leadership in the enterprise mobility segment. However, BlackBerry faces intense competition from key players with macro challenges in the auto and other embedded sectors. High research and development expenses for new products and technological obsolescence remain major headwinds. Also, forex woes along with high capital investments weigh on its near-term profitability.

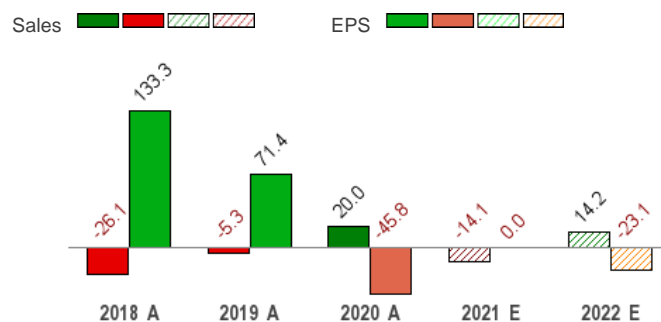
## Price, Consensus & Surprise



## Data Overview

|                                |                                    |
|--------------------------------|------------------------------------|
| 52-Week High-Low               | <b>\$6.89 - \$2.70</b>             |
| 20-Day Average Volume (Shares) | <b>3,861,587</b>                   |
| Market Cap                     | <b>\$3.2 B</b>                     |
| Year-To-Date Price Change      | <b>-11.8%</b>                      |
| Beta                           | <b>1.44</b>                        |
| Dividend / Dividend Yield      | <b>\$0.00 / 0.0%</b>               |
| Industry                       | <b>Wireless Non-US</b>             |
| Zacks Industry Rank            | <b>Bottom 31% (176 out of 254)</b> |

## Sales and EPS Growth Rates (Y/Y %)



|                               |                   |
|-------------------------------|-------------------|
| Last EPS Surprise             | <b>1,000.0%</b>   |
| Last Sales Surprise           | <b>11.3%</b>      |
| EPS F1 Estimate 4-Week Change | <b>0.0%</b>       |
| Expected Report Date          | <b>12/18/2020</b> |
| Earnings ESP                  | <b>0.0%</b>       |
| P/E TTM                       | <b>22.6</b>       |
| P/E F1                        | <b>43.5</b>       |
| PEG F1                        | <b>0.8</b>        |
| P/S TTM                       | <b>3.1</b>        |

## Sales Estimates (millions of \$)

|      | Q1    | Q2    | Q3    | Q4    | Annual* |
|------|-------|-------|-------|-------|---------|
| 2022 |       |       |       |       | 1,078 E |
| 2021 | 214 A | 266 A |       |       | 944 E   |
| 2020 | 267 A | 261 A | 280 A | 291 A | 1,099 A |

## EPS Estimates

|      | Q1       | Q2        | Q3        | Q4       | Annual*  |
|------|----------|-----------|-----------|----------|----------|
| 2022 |          |           |           |          | \$0.10 E |
| 2021 | \$0.02 A | \$0.11 A  | -\$0.01 E | \$0.04 E | \$0.13 E |
| 2020 | \$0.01 A | -\$0.02 A | \$0.03 A  | \$0.09 A | \$0.13 A |

\*Quarterly figures may not add up to annual.

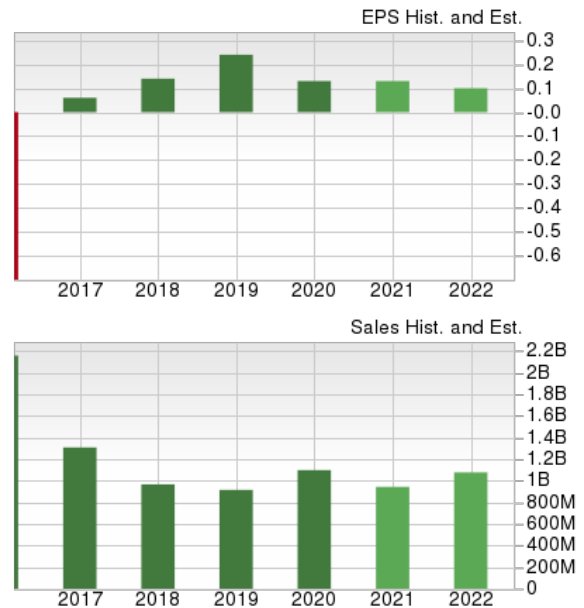
The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 11/23/2020. The reports text is as of 11/24/2020.

## Overview

Headquartered in Waterloo, Canada, BlackBerry Limited was founded in 1984. The company operates in North America, Europe, Middle East and Africa, and Other regions. The cybersecurity software and services company provides devices and software platform for managing security, mobility and communications among hardware, programs, mobile apps and the Internet of Things. BlackBerry UEM became the only unified endpoint management system to be included on Department of Defense Information Network (DoDIN) Approved Products List.

BlackBerry provides intelligent security software and services to enterprises and governments around the world. It secures more than 500 million endpoints, including more than 175 million cars. The company leverages its extensive technology portfolio to offer best-in-class security, safety and reliability to enterprise customers in growing segments of the cybersecurity, connected transportation, healthcare, financial services and government markets. BlackBerry SecuSUITE received accreditation from the government of Canada.

The company's goal is to remain a leader in regulated industries and other core verticals by continuing to extend the functionality of its secure BlackBerry Spark software platform through organic investments as well as strategic acquisitions and partnerships. The company intends to drive revenue growth and achieve margins that are consistent with those of other enterprise software companies. By product and service type, Software and Services generated 59.4% of total non-GAAP revenues in second-quarter fiscal 2021 while Licensing contributed 40.6%.



Source: Zacks Investment Research

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## Reasons To Buy:

- ▲ BlackBerry continues to invest in product development and go-to-market strategy, including strong channel partnerships, to drive long-term sustainable growth. The company is capitalizing on the secular trends of securing and connecting endpoints. It enables Enterprise of Things by providing the technology that allows endpoints to trust one another, communicate securely and maintain privacy. Solid software sales continue to aid the company while growth in its cybersecurity business remains a huge positive. BlackBerry acquired Irvine, CA-based cybersecurity firm, Cylance. Cylance's highly skilled cybersecurity workforce and market-leading portfolio of endpoint solutions are a strategic fit for BlackBerry and complement its Unified Endpoint Management and QNX businesses. As of Aug 31, 2020, BlackBerry had \$837 million in cash and equivalents with \$106 million of operating lease liabilities. This indicates that the company is most likely to meet its debt obligations. BlackBerry currently has a debt-to-capital ratio of 0.24 compared with 0.25 of the industry.
- ▲ BlackBerry clinched a contract from the NATO Communications and Information ("NCI") Agency for its SecuSUITE for Government to encrypt the conversations of technology and cyber leaders of the latter. The NCI Agency assists NATO's 29 member-nations to communicate in a secure manner and work together in smarter ways. Notably, the cybersecurity software company's technology mobilizes secure voice and text communications from unclassified through classified levels. The solution supports Android and iOS smartphones and tablets, and can be installed on-premise in a data center or in the cloud. It protects against threats to local and national security by enabling secure communications on mobile devices. Calls are encrypted from device to the crypto gateway installed in an organization's network to combat electronic eavesdropping by cybercriminals.
- ▲ For IoT, the cybersecurity software and services company intend to drive healthy revenue growth and increase market share in the industry vertical. At the same time, it intends to grow market share for BlackBerry Cylance, while improving profitability and reducing the cash burn. For licensing, the company seeks to close opportunity for higher amount of recurring revenues. In addition, it has created BlackBerry Government Solutions — a new independent subsidiary — which will accelerate its Federal Risk and Authorization Management Program (FedRAMP) initiatives. Headquartered in Washington, DC., BlackBerry Government Solutions has a separate corporate governance structure to comply with the U.S. national security requirements. The move allows the company to deepen its reach within the U.S. government sector by ensuring that its next-generation cybersecurity solutions and Spark platform meet FedRAMP and Authority to Operate certifications while providing customers better service.
- ▲ As a leading player in the enterprise mobility management, BlackBerry is widely recognized for productivity and security innovations. The company offers one of the most secure mobile enterprise solutions in the market through a broad portfolio of products and services. It offers an end-to-end software and services platform for the Enterprise of Things, which includes computers, vehicles, sensors, equipment and other connected endpoints within the enterprise that communicate with each other to enable smart business processes. With a holistic growth model, focusing both on organic and inorganic initiatives, BlackBerry aims to expand its market leadership in the enterprise mobility segment. The company leverages many elements of its extensive technology portfolio to extend best-in-class security and reliability to its solutions for the Enterprise of Things, including unified endpoint management (UEM), cybersecurity solutions, embedded systems, crisis communications, enterprise applications and related services, with hosting available on the company's global, scalable, secure network, as well as in the cloud. BlackBerry continues to increase and enhance its product and service offerings through both organic investments and strategic acquisitions. The company aims to remain a leader in its target enterprise markets by extending the functionality of its secure platform and delivering innovative solutions focused on strategic industry verticals.

BlackBerry continues to invest in product development and go-to-market strategy, including strong channel partnerships, to drive long-term sustainable growth.

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## Reasons To Sell:

- ▼ BlackBerry is currently facing macro headwinds in the auto and other embedded sectors. Due to uncertainties related to the COVID-19 pandemic, the company did not provide a detailed financial outlook for fiscal 2021. It operates in markets that are highly competitive and rapidly evolving. The company competes with a broad range of vendors in each of its businesses. Key competitive factors across its businesses include product features, relative price and performance, product quality and reliability, compatibility across ecosystems, service and support, and corporate reputation. Accordingly, both the nature of the competition and the scope of the business opportunities afforded by the markets in which the company competes are uncertain. Moreover, legal issues like the payment dispute with Nokia have taken a heavy toll on BlackBerry's long-term credibility. High technological obsolescence remains a significant challenge for the company, increasing its operating costs for continuous research and development (R&D) efforts to introduce new product frequently and fend off competition.
- ▼ The company's success depends upon its ability to enhance and integrate its current products and services, as well as the BlackBerry Spark platform, to provide for their compatibility with evolving industry standards and operating systems. The process of developing new technology is complex and uncertain, and involves time, substantial costs and risks, which are further magnified when the development process involves multiple operating platforms. BlackBerry may be required to commit significant resources to developing new products, software and services before knowing whether such investment will result in products or services that the market will accept. With increasing global exposure, BlackBerry is susceptible to the risk of adverse foreign currency exchange rate fluctuations.
- ▼ BlackBerry's ability to maintain and expand its market reach is increasingly dependent on developing and maintaining relationships with third party resellers and channel partners. If the company is unable to effectively identify and establish new relationships, its business results of operations and financial condition is likely to be materially adversely affected. Moreover, companies like BlackBerry operates in a heavy capital-intensive industry, incurring significantly high capital investments for technologically obsolescent offerings and R&D expenses. It also faces huge depreciation charges due to large fixed asset base. As it expands service portfolios, a decisive challenge remains as rivals tend to offer services at lower margin and disruptive prices in key segments. As such, it might not be able to tide over the broader challenges in the near term.

Due to uncertainties related to the COVID-19 pandemic, BlackBerry did not provide a detailed financial outlook for fiscal 2021.

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## Last Earnings Report

### BlackBerry's Q2 Earnings & Revenues Beat Estimates

BlackBerry reported solid second-quarter fiscal 2021 (ended Aug 31, 2020) results, with the top and the bottom lines beating the respective Zacks Consensus Estimate.

QNX design wins and major cybersecurity partnerships bode well. The company is also seeing positive signs in various parts of its go-to-market strategy.

#### Bottom Line

On a GAAP basis, net loss in the quarter was \$23 million or loss of 4 cents per share compared with a net loss of \$44 million or loss of 10 cents per share in the prior-year quarter. The improvement was mainly driven by a lower operating loss.

Non-GAAP earnings came in at \$62 million or 11 cents per share compared with \$1 million in the year-ago quarter. The bottom line beat the Zacks Consensus Estimate by 10 cents.

#### Revenues

Despite the challenges from the COVID-19 pandemic, quarterly total GAAP revenues grew 6.1% year over year to \$259 million, which exceeded the company's expectations. This was primarily driven by strong demand for BlackBerry's 'Work from Anywhere' solutions, which remains a major driver for the Spark business.

Non-GAAP revenues inched up 1.9% year over year to \$266 million. The top line surpassed the consensus estimate of \$239 million.

#### Other Details

Gross profit increased to \$199 million from \$176 million in the year-ago quarter, thanks to higher revenues and lower cost of sales. Total operating expenses increased to \$221 million from \$219 million. Operating loss was \$22 million compared with a loss of \$43 million in the prior-year quarter.

#### Cash Flow & Liquidity

In the first six months of fiscal 2021, BlackBerry did not generate any cash from operating activities compared with a cash utilization of \$47 million in the year-ago period. As of Aug 31, 2020, the company had \$837 million in cash and equivalents with \$106 million of operating lease liabilities.

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**Quarter Ending** **08/2020**

|                  |                     |
|------------------|---------------------|
| Report Date      | <b>Sep 24, 2020</b> |
| Sales Surprise   | <b>11.30%</b>       |
| EPS Surprise     | <b>1,000.00%</b>    |
| Quarterly EPS    | <b>0.11</b>         |
| Annual EPS (TTM) | <b>0.25</b>         |

## Recent News

On Nov 17, 2020, BlackBerry announced its collaboration with a self-driving truck technology provider Plus to integrate its much-acclaimed QNX technology into the latter's Class 8 self-driving trucks. Plus is the first automated truck developer to capitalize on the QNX software for its revolutionary autonomous driving systems. The company will particularly leverage the QNX Operating System for Safety software solution as part of this collaboration.

On Oct 8, 2020, BlackBerry announced its alliance with the software company ServiceNow to integrate the BlackBerry AtHoc solution into the Now Platform workflow stack, which will allow the IT teams to support rapid crisis communications with best-in-class service management. Markedly, this partnership will ramp up collaboration and productivity, thereby minimizing disruptions like service outages in various organizations.

On Oct 7, 2020, BlackBerry announced the integration of its critical event management platform BlackBerry AtHoc with Microsoft Teams. Given the ongoing COVID-19 pandemic situation, the collaboration is likely to support remote workforce with best-in-class connectivity infrastructure.

On Sep 22, 2020, BlackBerry announced that the U.S. Air Force has selected its Spark for their secure productivity needs. The agreement gives the organization access to the latest BlackBerry technologies for Unified Endpoint Management (UEM) and Unified Endpoint Security (UES). BlackBerry Spark allows governments and enterprises to modernize their digital infrastructure for high-performance 'work from anywhere' without any compromise on security.

On Sep 22, 2020, BlackBerry announced a new partnership to provide secure emergency management and crisis communications to organizations across Canada. The expansion of a long-standing relationship, TELUS will resell BlackBerry AtHoc, the most secure critical event management and communications solution, with TELUS' connectivity. The companies also announced their first customer win as part of this new arm to their partnership. Edmonton Police Services, with a community of a million citizens, has chosen BlackBerry AtHoc as its emergency preparedness solution. TELUS will resell BlackBerry AtHoc to government entities across British Columbia.

On Sep 16, 2020, BlackBerry announced that its Unified Endpoint Manager has achieved certification from the National Information Assurance Partnership, a U.S. government initiative which oversees the evaluation of commercial cybersecurity products for use in U.S. national security systems.

On Sep 14, 2020, BlackBerry announced that Saudi Financial Lease Contract Registry Company, known by the brand name SIJIL, has selected its Unified Endpoint Manager and Workspaces for its secure communications needs. SIJIL has chosen BlackBerry because of the company's exceptional security capabilities and its industry leadership in secure connectivity technologies.

## Valuation

BlackBerry's shares are up 3.3% over the trailing 12-month period. Stocks in the Zacks sub-industry are down 19.8% over the past year, but stocks in the Zacks Computer and Technology sector are up 34.6% in the same period.

The S&P 500 Index is up 14.5% in the past year.

The stock is currently trading at 3.15X trailing 12-month EV/EBITDA, which compares to 15.83X for the Zacks sub-industry, 15.15X for the Zacks sector and 15.83X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 34.95X and as low as 2.41X, with a 5-year median of 13.34X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$6.00 price target reflects 3.64X trailing 12-month book value.

The table below shows summary valuation data for BB

| Valuation Multiples - BB |               |       |              |        |         |
|--------------------------|---------------|-------|--------------|--------|---------|
|                          |               | Stock | Sub-Industry | Sector | S&P 500 |
| EV/EBITDA TTM            | Current       | 3.15  | 15.83        | 15.15  | 15.83   |
|                          | 5-Year High   | 34.95 | 16.17        | 15.8   | 16.17   |
|                          | 5-Year Low    | 2.41  | 9.54         | 8.25   | 9.54    |
|                          | 5-Year Median | 13.34 | 13.12        | 11.92  | 13.12   |
| P/B TTM                  | Current       | 1.65  | 0.77         | 8.12   | 6.04    |
|                          | 5-Year High   | 3.09  | 4.32         | 8.32   | 6.17    |
|                          | 5-Year Low    | 0.64  | 0.69         | 4.09   | 3.74    |
|                          | 5-Year Median | 1.74  | 1.99         | 5.6    | 4.91    |
| P/S F12M                 | Current       | 3.03  | 0.69         | 4.27   | 4.16    |
|                          | 5-Year High   | 8.71  | 1.58         | 4.48   | 4.3     |
|                          | 5-Year Low    | 1.32  | 0.69         | 2.77   | 3.17    |
|                          | 5-Year Median | 3.47  | 1.02         | 3.44   | 3.67    |

As of 11/23/2020

Source: Zacks Investment Research

## Industry Analysis Zacks Industry Rank: Bottom 31% (176 out of 254)



Source: Zacks Investment Research

## Top Peers

| Company (Ticker)                      | Rec     | Rank |
|---------------------------------------|---------|------|
| America Movil, S.A.B. de C.V. (AMX)   | Neutral | 3    |
| China Mobile Hong Kong Ltd. (CHL)     | Neutral | 4    |
| China Unicom Hong Kong Ltd (CHU)      | Neutral | 3    |
| Ceragon Networks Ltd. (CRNT)          | Neutral | 2    |
| KT Corporation (KT)                   | Neutral | 3    |
| Orange (ORAN)                         | Neutral | 3    |
| PLDT Inc. (PHI)                       | Neutral | 2    |
| Turkcell Iletisim Hizmetleri AS (TKC) | Neutral | 4    |

The positions listed should not be deemed a recommendation to buy, hold or sell.

| Industry Comparison Industry: Wireless Non-us |           |            |           | Industry Peers |          |         |
|---|-----------|------------|-----------|----------------|----------|---------|
|   | BB        | X Industry | S&P 500   | CHL            | CRNT     | KT      |
| Zacks Recommendation (Long Term)              | Neutral   | -          | -         | Neutral        | Neutral  | Neutral |
| Zacks Rank (Short Term)                       | 3         | -          | -         | 4              | 2        | 3       |
| VGM Score                                     | B         | -          | -         | A              | F        | A       |
| Market Cap                                    | 3.16 B    | 7.89 B     | 25.83 B   | 122.61 B       | 194.40 M | 5.22 B  |
| # of Analysts                                 | 2         | 2          | 14        | 3              | 1        | 2       |
| Dividend Yield                                | 0.00%     | 2.64%      | 1.49%     | 5.93%          | 0.00%    | 3.50%   |
| Value Score                                   | D         | -          | -         | A              | D        | A       |
| Cash/Price                                    | 0.28      | 0.20       | 0.07      | 0.54           | 0.15     | 0.45    |
| EV/EBITDA                                     | 35.44     | 4.99       | 14.64     | NA             | 15.38    | 1.91    |
| PEG F1  | 0.85      | 0.99       | 2.76      | 1.34           | NA       | 0.69    |
| P/B   | 1.65      | 1.56       | 3.55      | 0.77           | 1.30     | 0.42    |
| P/CF  | 14.07     | 4.34       | 13.80     | 2.94           | 24.32    | 1.48    |
| P/E F1  | 44.00     | 11.79      | 21.67     | 7.98           | NA       | 8.45    |
| P/S TTM                                       | 3.12      | 1.26       | 2.79      | NA             | 0.75     | NA      |
| Earnings Yield                                | 2.30%     | 7.60%      | 4.40%     | 12.53%         | -4.56%   | 11.83%  |
| Debt/Equity                                   | 0.00      | 0.89       | 0.70      | NA             | 0.00     | 0.41    |
| Cash Flow (\$/share)                          | 0.40      | 2.47       | 6.92      | 10.20          | 0.10     | 7.18    |
| Growth Score                                  | A         | -          | -         | B              | F        | B       |
| Historical EPS Growth (3-5 Years)             | 13.80%    | 6.16%      | 9.72%     | NA             | 33.29%   | NA      |
| Projected EPS Growth (F1/F0)                  | 0.00%     | 5.50%      | 0.42%     | 0.81%          | NA       | 17.76%  |
| Current Cash Flow Growth                      | 5.19%     | 3.59%      | 5.29%     | 3.59%          | -66.29%  | -4.78%  |
| Historical Cash Flow Growth (3-5 Years)       | -19.24%   | -1.64%     | 8.33%     | 2.61%          | 131.58%  | 6.03%   |
| Current Ratio                                 | 1.15      | 1.11       | 1.38      | 1.11           | 2.03     | 1.26    |
| Debt/Capital                                  | 0.00%     | 47.88%     | 41.99%    | NA             | 0.00%    | 29.13%  |
| Net Margin                                    | -72.19%   | 4.65%      | 10.40%    | NA             | -5.72%   | NA      |
| Return on Equity                              | 3.91%     | 4.76%      | 14.99%    | NA             | -10.43%  | NA      |
| Sales/Assets                                  | 0.29      | 0.56       | 0.50      | NA             | 0.92     | NA      |
| Projected Sales Growth (F1/F0)                | -14.10%   | 0.00%      | 0.23%     | 1.44%          | -8.43%   | 0.00%   |
| Momentum Score                                | C         | -          | -         | B              | B        | F       |
| Daily Price Change                            | -1.74%    | 0.00%      | 1.06%     | -1.25%         | 2.55%    | 0.38%   |
| 1-Week Price Change                           | 12.72%    | 0.12%      | 0.21%     | -4.38%         | 1.29%    | -0.19%  |
| 4-Week Price Change                           | 15.98%    | 7.01%      | 8.26%     | -8.50%         | -2.82%   | 6.82%   |
| 12-Week Price Change                          | 8.43%     | 4.86%      | 9.20%     | -14.53%        | 4.78%    | 8.23%   |
| 52-Week Price Change                          | 3.28%     | -9.00%     | 5.26%     | -24.16%        | 26.84%   | -8.35%  |
| 20-Day Average Volume (Shares)                | 3,861,587 | 119,525    | 2,312,054 | 1,732,822      | 330,842  | 676,387 |
| EPS F1 Estimate 1-Week Change                 | 0.00%     | 0.00%      | 0.00%     | 0.00%          | 0.00%    | 0.00%   |
| EPS F1 Estimate 4-Week Change                 | 0.00%     | 1.60%      | 0.96%     | 0.00%          | 31.25%   | 0.00%   |
| EPS F1 Estimate 12-Week Change                | 60.00%    | 3.26%      | 3.72%     | -1.75%         | 31.25%   | 0.00%   |
| EPS Q1 Estimate Monthly Change                | 0.00%     | 0.00%      | 0.00%     | NA             | -100.00% | NA      |

Source: Zacks Investment Research



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## Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

### Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we maintain a balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

### Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

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### Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

|                |          |
|----------------|----------|
| Value Score    | <b>D</b> |
| Growth Score   | <b>A</b> |
| Momentum Score | <b>C</b> |
| VGM Score      | <b>B</b> |

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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## Disclosures

**This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page.** Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

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ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

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## Glossary of Terms and Definitions

**52-Week High-Low:** The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

**20-Day Average Volume (Shares):** The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

**Daily Price Change:** This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

**1-Week Price Change:** This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

**4-Week Price Change:** This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

**12-Week Price Change:** This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

**52-Week Price Change:** This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

**Market Cap:** The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

**Year-To-Date Price Change:** Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

**# of Analysts:** Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

**Beta:** A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

**Dividend:** The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

**Dividend Yield:** The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

**S&P 500 Index:** The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

**Industry:** One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

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**Zacks Industry Rank:** The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

**Last EPS Surprise:** The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

**Last Sales Surprise:** The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

**Expected Report Date:** This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

**Earnings ESP:** The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

**Periods:**

**TTM:** Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

**F1:** Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

**F2:** Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

**F12M:** Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

**P/E Ratio:** The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

**PEG Ratio:** The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

**P/S Ratio:** The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

**Cash/Price Ratio:** The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

**EV/EBITDA Ratio:** The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

**EV/Sales Ratio:** The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

**EV/CF Ratio:** The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

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**EV/FCF Ratio:** The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

**P/EBITDA Ratio:** The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

**P/B Ratio:** The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

**P/TB Ratio:** The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

**P/CF Ratio:** The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

**P/FCF Ratio:** The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

**Earnings Yield:** The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 ( $3/35 = 0.0857$ ) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

**Debt/Equity Ratio:** The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

**Cash Flow (\$/share):** Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

**Current Ratio:** The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

**Debt/Capital Ratio:** Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

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**Net Margin:** Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

**Return on Equity:** Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

**Sales/Assets Ratio:** The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

**Historical EPS Growth (3-5 Years):** This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

**Projected EPS Growth (F1/F0):** This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

**Current Cash Flow Growth:** It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

**Historical Cash Flow Growth (3-5 Years):** This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

**Projected Sales Growth (F1/F0):** This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

**EPS F1 Estimate 1-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

**EPS F1 Estimate 4-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

**EPS F1 Estimate 12-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

**EPS Q1 Estimate Monthly Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.